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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,312	04/25/2006	Keiki Yoshitsugu	069804-0071	4615
20277 7590 09/24/2007 MCDERMOTT WILL & EMERY LLP 600 13TH STREET, N.W. WASHINGTON, DC 20005-3096			EXAMINER COLLINS, DARRYL J	
			ART UNIT 2873	PAPER NUMBER
			MAIL DATE 09/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/533,312

Applicant(s)

YOSHITSUGU, KEIKI

Examiner

Darryl J. Collins

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 11-16, 19 and 21-23 is/are rejected.
- 7) ☒ Claim(s) 7, 8, 10, 17, 18 and 20 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 04292005.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 9, 11-16, 19 and 21-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Saruwatari (U.S. Patent Publication 2003/0227691).

Saruwatari teaches a zoom lens comprising, in order from an object side, a first lens unit of positive optical power, a second lens unit of negative optical power, a third lens unit of positive optical power, and a fourth lens unit of positive optical power (page 2, paragraph [0019], lines 1-7), wherein, when zooming from a wide-angle end to a telephoto end, the first and second lens units move so as to trace a convex path toward an image side, and the third and fourth lens units move monotonously toward an object side (Figure 1) as claimed in independent claim 1.

Saruwatari continues to teach an imaging device capable of converting and outputting and optical image of a subject as and electrical image signal (Figure 13, element 25) comprising a zoom lens comprising, in order from an object side, a first lens unit of positive optical power, a second lens unit of negative optical power, a third lens unit of positive optical power, and a fourth lens unit of positive optical power (page 2, paragraph [0019], lines 1-7), wherein, when zooming from a wide-angle end to a telephoto end, the first and second lens units move so as to trace a convex path toward an image side, and the third and fourth lens units move monotonously

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toward an object side (Figure 1) as claimed in independent claim 11 and a camera capable of capturing an image (Figure 13, element 20) comprising an imaging device capable of converting and outputting an optical image of a subject as an electrical image signal (Figure 13, element 25) further comprising a zoom lens comprising, in order from an object side, a first lens unit of positive optical power, a second lens unit of negative optical power, a third lens unit of positive optical power, and a fourth lens unit of positive optical power (page 2, paragraph [0019], lines 1-7), wherein, when zooming from a wide-angle end to a telephoto end, the first and second lens units move so as to trace a convex path toward an image side, and the third and fourth lens units move monotonously toward an object side (Figure 1) as claimed in independent claim 21.

With regards to claims 2 and 12, Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and further teaches a diaphragm on the object side of the third lens unit (Figure 1) as claimed in dependent claims 2 and 12.

Again Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and further teaches a first lens unit including a single positive lens element (Figure 1, element A) as claimed in dependent claims 3 and 13.

Still again, Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and continues to teach a zoom lens meeting the conditional constraints expressed in terms of the total focal length, the focal length of the first lens group and the magnification change ratio (page 5, paragraph [0075], condition (7) and Table 5) as claimed in dependent claims 4 and 14.

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Saruwatari also teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and continues to teach a zoom lens meeting the conditional constraints expressed in terms of the total focal length, the focal length of the fourth lens group and the magnification change ratio (page 3, paragraph [0051], condition (4) and Table 1) as claimed in dependent claims 5 and 15.

Once again Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and continues to teach a zoom lens meeting the conditional constraints expressed in terms of the total thickness of the lens units and the magnification change ratio (Table 1) as claimed in dependent claims 6 and 16.

Still again, Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claims 1 and 11 and further teaches a cemented lens element included in the third lens unit (page 3, paragraph [0050]) as claimed in dependent claims 9 and 19.

Saruwatari teaches all of the claimed limitations of the instant invention as outlined above with respect to independent claim 21 and further teaches the camera as being a digital still camera as claimed in dependent claim 22 and also teaches the camera as being a digital video camera (page 7, paragraph [0097]) as claimed in dependent claim 23.

Allowable Subject Matter

Claims 7, 8, 10, 17, 18 and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The prior art taken either singularly or in combination fails to anticipate or fairly suggest the limitations of the independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. Although the prior art teaches a zoom lens comprising, in order from an object side, a first lens unit of positive optical power, a second lens unit of negative optical power, a third lens unit of positive optical power, and a fourth lens unit of positive optical power, wherein, when zooming from a wide-angle end to a telephoto end, the first and second lens units move so as to trace a convex path toward an image side, wherein the third and fourth lens units move monotonously toward an object side, the prior art fails to teach such a zoom lens wherein the fourth lens group includes a single lens element having a positive optical power and is bi-convex as claimed in dependent claims 7 and 17, a zoom lens wherein the lens element closest to the object side in the third lens unit has a positive optical power as claimed in dependent claims 8 and 18, nor a zoom lens wherein the third lens unit is moved in a direction perpendicular to an optical axis as claimed in dependent claims 10 and 20.

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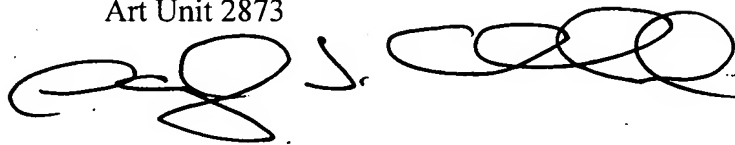
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Darryl J. Collins whose telephone number is 571-272-2325. The examiner can normally be reached on 6:30 - 5:00 Monday - Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on 571-272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Darryl J. Collins
Patent Examiner
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A handwritten signature in black ink, appearing to be 'D.J. Collins', written over the printed name and title.

13 September 2007